

# The Squeeze is on the La Silla Observatory

H. VAN DER LAAN, Director General, ESO

Visiting La Silla in early August, it struck me again how our observatory and its staff are squeezed between two developments in ESO, developments which by their nature tend to continue and which must be adjusted soon if we are to maintain a healthy working climate on La Silla. In a talk to all staff on the mountain I raised these and some other issues. The relevant developments are: (1) the increase in both quantity and technical complexity of the hard- and software in the domes, and (2) the slow but steady reduction of resources in favour of the VLT Observatory now under construction. Actually there is a third tendency which is laudable but makes matters more difficult still, namely the increasing ambition of our users community, manifest in increasing proposal pressure and more subtly in increased expectations if not demands of services to be provided by ESO/Chile staff.

The circumstances can be partly inferred from the two accompanying tables, which give the menus offered to visiting astronomers just five years apart. They are from the Announcements for Period 41 and Period 51 respectively, issued in August five years ago and this year. Close inspection of these two menus reveals how much a major observatory changes in just five years, over and above the addition of the NTT with all its sophistication and corresponding technical fragility. Nearly all detectors on the major telescopes have been renewed, thanks to industrial developments and a large effort by the Instrumentation Groups in Garching to stay on top of this evolution. The readiness maintenance for all these detectors on La Silla is no small task. The power and versatility of EFOSC on the 3.6-m have spawned the second EFOSC now on the 2.2-m telescope as well as EMMI on the NTT and DEFOSC, ready next year for the 1.54-m Danish telescope. EMMI is a veritable suite of instruments all rolled into one compact multi-mode device. Infrared capacities on La Silla have dramatically improved with the renovated IRSPEC on the NTT and the IRAC2 imager on the 2.2-m. Next year the 10-micron spectrophotometer TIMMI adds another infrared state-of-the-art capability to the 3.6-m.

For Periods 39 and 40 (1 April 1987 – 31 March 1988) there were 670 proposals while for Periods 49 and 50 (1 April 1992 – 31 March 1993) there were 880, with in addition two dozen Key Pro-

grammes running now. While I have re-distributed resources for La Silla somewhat over the several departments in the Observatory, the total manpower resources have actually decreased slightly in the last five years. Yet our teams there

have maintained a high service quality while coping with the greatly augmented quantity of telescope-instrument mode combinations. It is an impressive increase in productivity which is now approaching its limits.

3.6m	PF Triplet	Blue	Red	Direct photography	
	Infrared Photometer			Grism	
	Infrared Speckle			Photometric Wedge	
	IRSPEC			Bolometer	
	Cass B & C Spectrograph			In Sb Detector	
	Cass B & C Optopus			CCD (LR*)	
	Cass Echelle Spectrograph			CCD (coated GEC)	
	EFOSC			CCD (LR*)	
				CCD (HR*)	
				CCD (LR*)	
2.2m	Cass Direct Imagery			CCD (coated GEC)	
	Cass B & C Spectrograph			Bolometer	
	Polarimeter			In Sb Detector	
	Infrared Photometer				
1.5m	Cass B & C Spectrograph			Reticon	
	Echelec Spectrograph			CCD (coated GEC)	
	Coudé Spectrograph			CCD (LR*)	
1.4mCAT	CES Short Camera	Blue	Red	Camera I	Camera II
	CES Long Camera	Blue	Red	CCD (HR*)	
				Scanner	
				Reticon	
1m	Infrared Photometer			Bolometer	
	Single Channel Photometer			In Sb Detector	
50cm	Single Channel Photometer				
				PM RCA 31034	
90cm DUTCH	Single Channel Photometer			PM EMI 9789 QB	
	Walraven Photometer			PM EMI 9658	
61cm BOCHUM	Single Channel Photometer				
				CCD Camera	
1.5m DANISH	Direct Imagery			Photography	
	6 Ch Photometer				
50cm DANISH	uvby H $\beta$ Photometer				
				LR - Low Resolution RCA 512-320 pixels 30-30 $\mu$	
Schmidt GPO	With Prism			HR - High Resolution RCA 1024-640 pixels 15-15 $\mu$	
	Without Prism				
SEST	3mm Receiver				

Table 1. Telescopes and Available Auxiliary Equipment (Period 41, 1 April-1 October 1988).

ESO Headquarter resources are now predominantly directed towards the design and construction of the VLT Observatory. Readers of the *Messenger* are well aware of the new observatory's scope and the multiplicity of its technological systems. They are unprecedented in the history of ground-based astronomy. They are also a daunting challenge for the whole of ESO and our partners, industrial and institutional. I have had no choice but to divert to the VLT all the resources that could in my view be possibly spared in the Science Division and on La Silla. We have now reached the stage where users have to be confronted with resource limits, where the present opportunities on La Silla will be curtailed for the sake of future opportunities on Paranal.

In the Scientific-Technical Committee a discussion is to take place on the options for containing the La Silla staff's workload. It is clear that quality and reliability cannot be compromised. Instead, the menu of what is offered in any one period must be simplified. Instrument changes, with the attendant alignment, stabilization and calibration tasks, are the prime source of technical workloads. I have asked the heads of the Technical Research Support and of the Astronomy Support Departments to prepare a paper for the November meeting of the STC. We astronomers are notoriously incapable of deciding what we do *not really* need; as a community we usually behave like the character in the popsong who asserts that "I want it all and I want it now". But ESO is

"caught between a rock and a hard place" and if we do not make choices then the compromises that are the worst choice of all will arise by default. And so the squeeze on La Silla will be diverted, to a squeeze on the STC and subsequently on Council, the next Executive and ultimately on ESO's users. All for the sake of the exciting prospects created on Cerro Paranal. I am sure they are worth it!

## New ESO Scientific Preprints

(June – August 1992)

3.6m	Infrared Photometer	Bolometer	
	Prime Focus Direct Imaging	InSb Detector	
	EFOSC 1	CCD TH1K#19 Coated	
	MEFOS	CCD TEK#26	
	CASPEC	CCD TEK512#16	
	Link to CES (Specify camera under 1.4m CAT)		
3.5m NTT †	S <sub>A</sub> ) IRSPEC	CCD TEK1K#25	
	S <sub>A</sub> ) SUSI	CCD TH1K#18	
	S <sub>B</sub> ) EMMI Standard Configuration Red	CCD TEK1K#28	
	S <sub>B</sub> ) EMMI High Resolution Echelle Red		
S <sub>B</sub> ) EMMI Standard Configuration Blue			
2.2m	Direct Imaging	CCD RCA#8 H-Res	
	EFOSC 2	CCD TH1K#19 Coated	
	Infrared Photometer	Bolometer	
	IRAC 1	InSb Detector	
	IRAC 2		
1.52m	PISCO		
	Cass. B&C Spectrograph	CCD FA2K# Coated	
1.4m CAT *	Echelec Spectrograph	CCD RCA#13 H-Res	
1m	CES : Short Camera (Blue) *	CCD FA#27 Coated	
	CES : Short Camera (Red) *	CCD RCA#9 H-Res	
	CES : Long Camera (Blue) *		
	CES : Long Camera (Red) *		
50cm	Infrared Photometer	Bolometer	
	Single Channel Photometer	In Sb Detector	
50cm Danish		P.M.T. RCA 31034	
		P.M.T. EMI 9789 QB	
		P.M.T. EMI 9658	
		P.M.T. HAM R943-02	
1.54m Danish	uvby H $\beta$ Photometer		
90cm Dutch	Direct Imaging	CCD TEK1K#	
Schmidt GPO	Direct Imaging	CCD GEC#7 Coated	
		Number of plates required	
SEST	With prism	IIa-O	IIIa-F
	Without prism	IIIa-J	IV-N
	0.8mm Receiver	Narrowband AOS	
	1.3mm Bolometer	Broadband AOS	
	1.3mm Receiver		
	3.0mm Receiver		

Notes: (\*) The combination of these telescopes, instruments and detectors can be used remotely from the ESO Headquarters in Garching.  
 (†) S<sub>A</sub>/S<sub>B</sub> Option available simultaneously.

Table 2. Available Telescopes and Auxiliary Equipment (Period 51, 1 April–1 October 1993).

844. P. Ruiz-Lapuente and L. B. Lucy: Nebular Spectra of Type Ia SNe as Probes for Extragalactic Distances, Reddening and Nucleosynthesis. *The Astrophysical Journal*.
845. M. A. Prieto, J. Walsh and Robert Fosbury: IPCS Observations of Extended Gas in Radio Galaxies. *Gemini*.
846. J. Einasto and M. Gramann: Transition Scale to a Homogeneous Universe. *Astronomy and Astrophysics*.
847. F. Murtagh, M. Sarazin and H.-M. Adorf: Statistical Prediction of Astronomical Seeing and of Telescope Thermal Environment. ESO Conference on "Progress in Telescope and Instrumentation Technologies".
848. G. A. Tammann: The Cosmic Expansion and Deviations from It. Crafoord-Symp. "Extragalactic Astronomy including Observations Cosmology".
849. L. Wang and E. J. Wampler: The Supernova SN 1987A: the Nebular Loops and "Napoleon's Hat". *Astronomy and Astrophysics*.
850. T. Richtler, E. K. Grebel, H. Domgörgen, M. Hilker and M. Kissler: The Globular Cluster System of NGC 1404. *Astronomy and Astrophysics*.
851. R. F. Peletier: The Stellar Content of Elliptical Galaxies: Optical and Infrared Colour Profiles of M 32 and NGC 205. *Astronomy and Astrophysics*.
852. R. Siebenmorgen, E. Krügel and J. S. Mathis: Radiative Transfer for Transiently Heated Particles. *Astronomy and Astrophysics*.
853. M. Della Valle and N. Panagia: Type Ia Supernovae in Late Type Galaxies: Reddening Correction, Scale Height and Absolute Maximum Magnitude. *The Astronomical Journal*.
854. L. Pasquini: The Ca II K Line in Solar Type Stars. *Astronomy and Astrophysics*.
855. Bo Reipurth and B. Pettersson: Star Formation in Bok Globules and Low-Mass Clouds. V. H $\alpha$  Emission Stars Near SA 101, CG 13 and CG 22. *Astronomy and Astrophysics*.